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ABSTRACT

The report examines effectiveness and cost studies of early special education programs for handicapped children, discusses research and resulting data from Colorado, and concludes that preschool services are beneficial to students and cost effective for society. Chapter 1 reviews longitudinal, shorter term empirical, and third party evaluation studies, with such results as that substantial gains have been documented across handicapping conditions, and that these gains do not disappear. Also found favorable are cost effectiveness, long-term economic returns of early intervention, and direct and indirect savings, when special education begins before age 6. Chapter 2 describes the Colorado research design study in which 518 students from four school districts who received preschool special education were followed through elementary school for 3 years and then compared with nonpreschool educated students. Among results reported are that the Ss received higher test scores, retained skills over time, and required significantly fewer special services than nonpreschool students. Chapter 3 presents aggregated data from 11 Colorado preschool programs providing services from 3-13 years to 4,568 students in various types of programs. Among findings reported is that 31.4 percent of 1,327 children remaining in the districts are now in regular classes, with concomitant savings. Chapter 4 consists of four case studies (e.g. twins, one with preschool experience), and comments by parents. A bibliography contains 6 citations. (MC)

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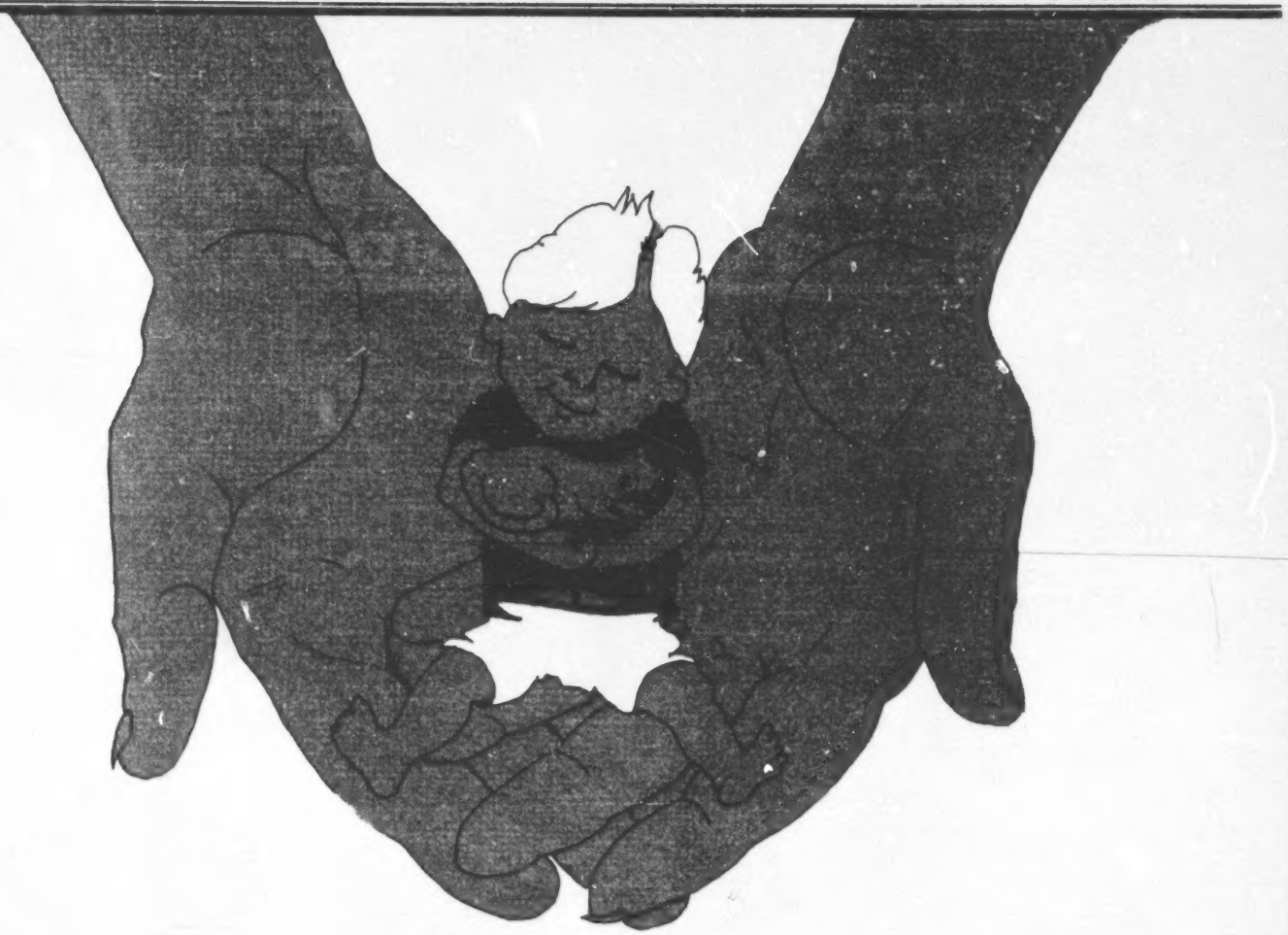
EFFECTIVENESS OF EARLY SPECIAL EDUCATION FOR HANDICAPPED CHILDREN



Report Commissioned by the Colorado General Assembly

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EXECUTIVE SUMMARY

EFFECTIVENESS OF EARLY SPECIAL EDUCATION FOR HANDICAPPED CHILDREN

Are special education programs for preschool handicapped children a sound investment? A comprehensive review of research in this area indicates that preschool programs are effective and can provide long-term human and economic benefits.

NATIONAL RESEARCH ON EFFECTIVENESS

Recent research efforts have focused on the effectiveness of providing special education services to young handicapped infants and preschool children as well as to children "at risk" of developing a handicap. Lazar (1979) analyzed the findings of 15 longitudinal studies of low income and handicapped children who were placed in preschool programs and concluded that these programs had a significant long-term effect on school performance.

A longitudinal study reported by Schweinhart and Weikart on the Ypsilanti Perry Preschool (1981) also demonstrated the long-term benefits of preschool programs. The study followed 123 borderline retarded children for fifteen years beginning at age three. Children were randomly assigned to either an experimental group who attended preschool or to a control group who received no preschool program. The results showed that children who had attended preschool maintained a stronger commitment to school, showed higher scholastic achievement, required half as many special education services, and were retained less often in grade. According to this study the benefits of the program clearly outweighed the costs.

The positive impact of early intervention has been demonstrated repeatedly through research. Preschool programs have proven effective for children with a variety of handicapping conditions.

Bricker and Sheehan (1981) found substantial gains on multiple evaluation measures across diverse groups of children - normal, at risk, mildly, moderately, and severely handicapped. A nationally recognized longitudinal study conducted by Weiss (1981) reported significant improvement of language impaired children placed in preschool programs utilizing the INREAL method of language instruction. These children required substantially fewer special services in later school years. The effectiveness of early education has also been reported for children who have sensory impairments (Adelson and Fraiberg, 1975; Simmons-Martin, 1981), Down's Syndrome (Hayden and Haring, 1976; Dmitriev, Hayden and Haring, 1981), and behavior disorders (Strain, 1981). There is documentation of lasting improvement in the functioning of severely handicapped children (Bruhei and Dow, 1980, Rosen, Morris and Sitkei, 1981). In addition, disadvantaged children have been shown to require fewer special education and remedial services as a result of public school education experiences prior to kindergarten. (New York State Education Department, 1982).

Recent research has verified the efficacy of early education programs. Substantial gains have been documented across different types of handicapping conditions at all levels - mild, moderate, and severe impairments. It is no longer debatable that early intervention programs reap immediate and long-term gains for handicapped children (Karnes, et. al., 1981).

Cost Analysis of Early Education

Early intervention has also proven to be a sound economic investment. Kakalik, Furry, Thomas, and Carny (1981) recently compiled data on the cost of special education and related services for handicapped children. Results determined the cost of special education to be 2.17 times the cost of regular education. The total annual cost of special education and related services per handicapped child was estimated to be $4,698, compared to $2,636 per child in regular education. Special education is costly. However, early preschool programs can reduce the cummulative expense of special education.

Wood (1981) recently published an extensive review of the relative costs of special education based upon the age of entry into the program. The data analyses clearly indicated that delaying services results in an increasing number of children requiring more special services at higher costs.

Cost/benefit analyses have delineated several factors which indicate that preschool programs are cost effective. One economic benefit resulted from the reduction of children who require costly special services (Lazar, 1979; Schweinhart and Weikart, 1981, Weiss, 1981). The INREAL project in Colorado and the Perry Preschool Project determined that the reduction in the cost of subsequent required special education services alone completely covered the cost of the programs. Additional cost savings have also been documented. Braddock (1976) concluded that income taxes paid to the government by individuals in nonsevere disability categories exceeded the total cost of specialized educational programs. Savings from reduction in income maintenance, avoidance of institutionalization, and increased earnings of parents provide justification for early intervention for the severely handicapped.

National Trends Toward Preschool Special Education

Presently 23 states have mandated legislation for the provision of educational services to handicapped children under age five; four of these states begin service provision at birth (Nebraska, Iowa, Michigan, Maryland). In our Western region Nebraska, Oklahoma, Texas, and South Dakota have recently passed legislation and regulations mandating services to children under five. While Colorado has recognized a need for further services in this area, only a limited number of programs for young handicapped children exist.

COLORADO RESEARCH ON EFFECTIVENESS

National research findings indicate that early special education for handicapped children is effective and cost beneficial. But what about Colorado children? Is there any evidence that they, like the children studied in other states, have benefited from early special education efforts? An affirmative answer to that question has been provided by a research study done here in Colorado by Dr. Rita Weiss at the University of Colorado.

Colorado Research Design Study

Four Colorado school districts, Adams County District #50, Boulder Valley RE2, St. Vrain RE1J and Weld County participated in this program of scientific study to determine the effectiveness of preschool special education. A goal of the preschool special education program was to improve the language and related learning skills of three to five year-old handicapped children, thereby reducing their need

for special education services in elementary grades.

Weiss found that:

- children who had received the Preschool INREAL program scored significantly higher on language skill testing than children who received no preschool special education;
- significantly **fewer children needed special education services** after receiving the Preschool INREAL program than children who received no preschool special education;
- it cost the school district **less** to serve children who received the Preschool INREAL program than children who received no preschool special education. The district special education costs were reduced for handicapped preschool children who had received the Preschool INREAL program. Even after subtracting the cost of the Preschool INREAL program, the school districts, over three years, saved **$1560.00 per handicapped pupil.**

Colorado Local Longitudinal Data

An additional study of the effectiveness of preschool special education in Colorado examined the subsequent educational placements of 1,347 children who had attended a variety of preschool programs for handicapped children in 11 Colorado school districts.

The results indicate that almost one-third of the handicapped children who received special education services through preschools for handicapped children were able to begin public school in regular education with no special education services. The proportion was about the same regardless of the kind or severity of handicapping condition. And many (500 or 37.1%) were able to enter regular education with only support services from special education.

A survey of these students' current teachers revealed that approximately 40% of these youngsters were judged to be average or above average in reading, math, and language arts.

A telephone survey to school district administrators indicated that all administrators in districts with preschool special education programs were positive about these programs and considered them to be a very important part of the educational continuum. Administrators in districts without programs agreed that preschool special education benefited handicapped children and their families. The absence of such programs in these districts was generally attributed to funding.

CONCLUSIONS

- If some handicapped children are not helped at an early age, their handicaps may become compounded and produce the need for more intensive services.
- Early childhood programs positively influence development and this positive impact significantly effects later development and performance.
- Early special education can reduce the effects of a handicapping condition and result in higher scholastic achievement.
- Early childhood programs can reduce the need for lengthy and costly special education services at a later time.
- Early education is effective for all types and levels of handicapping conditions. Substantial gains have been documented for mild, moderate, and severely handicapped children.
- Early education reaps immediate and long-term gains for handicapped children, their families and society; delaying is costly to everyone.

CHAPTER ONE

THE EFFECTIVENESS OF EARLY SPECIAL EDUCATION FOR HANDICAPPED CHILDREN

Is preschool special education for handicapped children a sound investment? With current economic constraints, early childhood special education programs must produce evidence that they are cost effective for policymakers and taxpayers to support them.

A concerted effort has been made during the past twenty years to determine whether providing education early in a handicapped child's life will help the child be a better learner later on. Researchers have tried to answer three fundamental questions:

1) Can early education ameliorate or eliminate a child's learning handicap?

2) Do the effects of early education last?

3) Is early education cost effective?

This chapter presents some answers to those questions by reviewing the relevant studies of the efficacy, the impact, the costs and the benefits of early intervention programs.

NATIONAL RESEARCH ON EFFECTIVENESS

Child development researchers such as Bloom, Hunt, Bruner and Piaget have established that human learning and development occur at their fastest rates in the years prior to any child's entrance into school. For the handicapped child, these early years are even more crucial. A child with a problem in only one area of development (e.g. language) may suffer negative effects which impact on other developmental areas until he or she develops what are commonly referred to as "cumulative deficits". Unless something is done at an early age the effects of a child's handicapping condition may be compounded.

Fortunately, a substantial amount of empirical research indicates that early intervention can ameliorate or eliminate many children's handicaps and that these effects endure. The research studies can be divided into longitudinal studies, shorter term studies and third-party evaluations.

Longitudinal Studies

In the 1930's, Skeels and Dye (1939) examined the effect of environmental stimulation on two groups of children under age three. Thirteen retarded infants (mean IQ = 64) from an orphanage were placed on wards of institutions for mentally retarded females. Mother-surrogates in this environment provided attention and stimulation for the infants. Twelve other infants with average intelligence (mean IQ = 87.6) remained in the nonstimulating environment of the orphanage. After a year and a half, the IQs of the two groups were reevaluated. The infants who received stimulation gained an average of 27.5 IQ points while the other group dropped an average of 26.2 points.

Twenty-one years later, Skeels (1966) conducted a follow-up study of the subjects. He found that all the infants who had received early stimulation had graduated from high school and were self-supporting individuals. On the other hand, five from the other group had been placed in institutions for the mentally retarded and the average grade level of this group was less than third grade. Skeel's work suggested

that early intervention could increase intellectual development and that the increases were lasting.

In a study conducted through the Consortium of Longitudinal Studies at Cornell University, Lazar (1979) analyzed the findings of fourteen longitudinal studies of handicapped and low-income children who were served by infant and preschool developmental programs prior to 1969. These programs operated independently of one another and varied their means of service delivery — i.e., some were center based, some were home-based, and some were mixed. Lazar found that children who were served under these programs:

- consistently scored higher on achievement measures
- required fewer special education placements, and
- were retained in grade less often than children who did not have preschool

These programs had a significant long-term effect on the student's school performance.

Recently Schweinhart and Weikart (1981) reported on their fifteen year follow-up study of 123 subjects from age three to their current age of 19. In 1962 these children from low-income homes were diagnosed as borderline retarded and considered to be educationally "at risk". The children were randomly assigned to an experimental preschool program group or to a control group which received no early childhood program. By 1981, children who attended the Perry Preschool program showed a stronger commitment to schooling, higher scholastic achievement, and a 50% reduced need for special education services, compared to the control group. The Perry Preschool Program was found to have generated a 248% return on the initial investment.

Another nationally recognized longitudinal study occurred here in Colorado. Weiss (1981) conducted a three-year study to determine whether a particular intervention program called INREAL could prevent later language-related problems for three to five year-old language-handicapped and bilingual (Spanish) children. The longitudinal data analyses indicated that INREAL intervention in preschool and kindergarten reduced the need for special education services for language handicapped children and reduced their grade-retention rate. Cost/benefit analysis indicated that the per pupil cost of the INREAL approach was absorbed within one year after treatment ended. Further details about this study are presented in Chapter Two.

Karnes, et. al. (1981) followed 86 mild-to-moderately handicapped children who had been enrolled during 1973-1979 in their preschool program on into their elementary years. Their data indicated that the children made a successful transition into elementary school. Eighty percent of the children were placed in regular classrooms — of these, 40% received support services; only 15% had been retained. Data from this study indicate that early intervention with the young handicapped can provide these children with the social and academic skills needed to function adequately in regular school classes. The New York State Department of Education conducted a five-year longitudinal study (1982) of 1, 348 disadvantaged children who had been enrolled in an Experimental Pre-Kindergarten Program in the public schools. This study also reported positive findings. The children's progress and performance on knowledge, skill and development were compared with a control group of similarly disadvantaged children who did not attend the Pre-Kindergarten. The children who attended the Pre-Kindergarten Program generally scored higher than the children who did not on measures of cognition, school-related knowledge and

skills, general reasoning and verbal concepts. Of even greater consequence, significantly fewer pre-kindergarten children than control group children had repeated grades or been placed in special education classes by the end of the third grade. Using the progress of the control-group children as a predictor of future placement it was concluded that "in the sample of 1,348 former pre-kindergarten children, 117 children who might now not otherwise be adequately meeting the requirements of school were making normal progress". The authors of this study suggested that "substantial savings in the cost of special education and remediation might be realized by expanding educational opportunities for preschool children".

All of the above studies were conducted using different theoretical models with heterogeneous groups of young handicapped children and in a variety of settings. Each has provided evidence of the effectiveness of early intervention. In addition to this somewhat limited amount of longitudinal data, a number of shorter term studies are available. The next section will review this body of literature, grouping the studies according to the severity or type of handicapping condition.

Shorter Term Empirical Studies

The longitudinal data demonstrate the long-term effectiveness of early intervention. However, some questions still persist about the specific benefits of early special programs for children with different handicaps. Some frequently stated concerns are: 1) Is early intervention effective for all categories of handicapping conditions? 2) Does the severity of the handicap influence program effectiveness? 3) Do severely handicapped children demonstrate lasting improvement from early programming? Research indicates that early intervention has proven effective for children across a variety of handicapping conditions and degrees of severity.

Mental Retardation: Many researchers have studied the retarded population. One noteworthy study involving mentally retarded children from ages three to six was conducted by Kirk (1958, 1965). The experimental group of fifteen children in an institution participated in a preschool program. Twelve comparable children, the control group, remained in the wards and did not receive early intervention services. Significant gains on intellectual measures were demonstrated by the children in the preschool program. Six of them were able to leave the institution by ages seven and eight. None of the children in the control group left the institution.

Moore, Fredericks, Baldwin (1981) reported the results of a post hoc study of 151 Oregon children, ages nine to eleven, who were currently placed in programs for the trainable mentally retarded. Within this group 68 children had not attended a preschool program, 35 had one year of preschool, and 48 had two years of preschool. The investigators found that children who had received two or more years of preschool demonstrated higher skill acquisition in language, academics, self-help and motor development, in contrast to the control group.

Numerous studies support early intervention for children with Down's Syndrome. Research findings in this area are particularly significant, as Down's Syndrome is one of the most frequently identified causes of mental retardation (Hayden and Haring, 1976). Bricker and Bricker (1976) provided early intervention to infants with Down's Syndrome in a setting with normal infants and found it successful. Hanson and Schwartz (1978) reported similar results in a study involving twelve infants diagnosed at birth as having Down's Syndrome. The infants received a home-based parent program between the age of four weeks to six months. These infants consistently reached developmental milestones earlier than the norms previously set for such children.

Haden and Haring (1976) investigated initial gains for children with Down's Syndrome in a preschool program. Gains of 43% were documented in motor and verbal responses. A follow-up study (Dmitriev, Hayden and Haring, 1981) was conducted to determine whether these gains were maintained in the elementary years. The children continued to score higher than children with Down's Syndrome who had not had preschool.

Sensory Impaired: The impact of preschool programs has been demonstrated with children who have sensory handicaps — hearing or vision problems. Horton (1976) documented significant differences on measures of language and achievement tests between severely hearing impaired children who had entered a program before age three and those who entered after age three. By second grade the children who received earlier intervention services scored similarly in language competence and achievement to their normal peers. Adelson and Fraiberg (1975) reported similar findings from a study of motor development for congenitally blind infants.

Simmons-Martin (1981) conducted a two and one-half year follow-up study of 44 severely hearing impaired children from two to four years old. An analysis of five successive language evaluations demonstrated that the children's scores increased consistently.

A post hoc study on the effects of early treatment of 108 hearing impaired infants and preschoolers was recently published by Clark (1981). The children placed in early education programs scored significantly higher in language and comprehension than peers who received no services. Gains appeared to be linked to the time that the intervention began: the earlier the treatment was initiated, the greater the gain.

Emotional Disorders: Strain (1981) completed a follow-up study of 40 children who had displayed severe emotional problems as preschoolers and had received treatment at the Regional Intervention Program in Nashville, Tennessee. Clients selected for this study had not received any special services for the past three to nine years. Among other significant findings, Strain found that there were no differences between former clients and randomly selected peers with respect to their appropriate/inappropriate social behaviors. Teacher ratings for these children were similar to ratings for their nonhandicapped peers.

Severely/Profoundly Handicapped: Early intervention with the severely/profoundly handicapped has also shown positive results. According to Scheifelbush (1978) early intervention aids in ameliorating the long term effects of handicapping conditions. Bricker and Dow (1980) recently conducted a study of 50 severely/profoundly handicapped children under five who were enrolled in a preschool program at the University of Miami's Mailman Center. Results of their study indicated significant gains for those children who received intervention. These gains were also adequate predictors of later performance.

Other recent research corroborates these findings. Rosen-Morris and Sitkein (1981) worked with twenty profoundly handicapped children ranging from 18 months to six years old. Data collected during a four-year period demonstrated significant developmental gains for the subjects. Bricker and Sheehan (1981) followed severely impaired children from six months to five years old who participated in a daily preschool program for over two years. Pre-post test measures yielded 62% significant gains over a variety of areas such as communication, social skills, self-help, and so on, and 75% educationally significant gains. There was no loss or decline in achievement gains, indicating that the patterns of progress were reliable and stable.

Noncategorical Programs (Mixed Handicaps): It is not always possible to define the primary handicap of some preschool children because many are placed according to the degree of their handicap - mild, moderate, or severe. Hayden, Morris and Bayley (1977) evaluated 116 graduates from the Model Preschool Center for the handicapped at the University of Washington. The students placement(s) at the time of the study ranged from kindergarten through grade eight. Analysis of the data showed that 34% of the graduates were in regular education classrooms and were not repeating grades. Of the children who required special education services, 22% were functioning cognitively as well as the upper 75% of the graduates in regular education. The gains achieved during preschool were maintained after preschool. A further examination showed that the subjects did not require special education as they progressed into higher grades.

Zeitlin (1981) followed 36 children who had participated in the Learning to Cope preschool program. This program serviced a variety of handicapped children — educable and trainable mentally retarded, emotionally disturbed, communication handicapped, perceptually and neurologically impaired, orthopedically handicapped, and visually impaired. Of the 36 children who completed the program, 64% (23 children) went into regular kindergarten classes. Seventeen children continued to need the support of the resource room.

Another early intervention project of particular interest is The Preschool Program at the Center on Human Development, University of Oregon. This noncategorical program enrolled children not only with diverse handicaps (Down's Syndrome, cerebral palsy, sensory impairments and general developmental delays) but also children who were nonhandicapped but considered "at risk". The degree of the handicapping conditions ranged from mild to severe; the average age of the subjects was 3½ years. Child progress was carefully evaluated over two years. Review of these data by Brecher and Sheehan (1981) showed substantial improvement on a number of evaluation measures. Most important, improvement was demonstrated for all groups of children in the program - normal, at-risk, mildly, moderately and severely handicapped. Not only does this program provide positive support for early intervention but it also suggests that integrated programs are perfectly feasible.

The benefits of intervention at the preschool level are apparent in the aforementioned studies. However, these studies were conducted by professionals who were directly involved with the programs being evaluated. To further substantiate these research findings and to ensure unbiased reports, third party evaluations were also undertaken.

Third Party Evaluation

Notable progress has been made in the last decade in the evaluation of programs. In 1972 the Joint Dissemintion Review Panel (JDRP) was established by the U. S. Department of Education to review preschool programs receiving federal funds in order to ensure that federal monies would go only to programs that could prove their effectiveness. Today the JDRP reviews a broad range of programs which receive funds from a variety of sources. To date 19 early childhood projects have received approval by providing evidence of effective programming for children.

The Battelle Center for Improved Education (Stock, et. al. 1976) completed the first third party evaluation of the demonstration preschool programs established by the Handicapped Children's Early Education Assistance Act

(1968). This review evaluated 160 randomly selected children from 32 randomly selected early childhood projects. The results showed significant child gain in five skill areas. The evaluators concluded from their findings that HCEEP programs have a positive impact upon the children and parents served.

Efficacy studies in early childhood special education strongly suggest that it is beneficial. Substantial gains have been documented across **diverse** handicapping conditions and **all** degrees (mild, moderate, severe) of impairment. These gains do not disappear over time. It is no longer debatable that early special education programs provide immediate and long term gains for handicapped children (Karnes, et. al., 1981).

COST ANALYSIS OF EARLY EDUCATION

Even though many early special education programs have proven effective, the cost of providing such a service must be carefully examined. Special education for preschool handicapped children must prove to be a sound economic investment with demonstrated fiscal accountability. Although the involvement of many variables — e.g. age, the severity of handicapping conditions or length of service period — presents methodological problems (Garland, et. al., 1981), several studies have nevertheless successfully examined the cost of early intervention programs.

Review of Research Cost Effective

The Rand Corporation (Kakalik, Furry, Thomas, Carney 1981) recently conducted a study of the cost of special education and related services for handicapped children, using information from a national survey taken in 1977-1978. Cost information is provided for the following variables: age level, type of handicapping condition and type of educational placement. Kakalik, et. al. determined the cost of special education to be 2.17 times the cost of regular education. The total cost of special education and related costs per handicapped child was estimated to be $3577 annually, compared to $1650 per child annually in regular education, based on 1977-78 nationwide school expenditures. Over the past three years the estimated costs per child have risen to $4898 and $2638 respectively.

The more severe the handicap, the higher the cost. The yearly costs ranged from $2253 for speech impaired children to $9664 for functionally blind children. Costs according to educational placement ranged from a low of $2250/handicapped child in a regular class receiving indirect special service to $5352 per child in a special day school only for handicapped children. Preschool cost per year was $3526 per handicapped child. At the elementary level the annual average cost per child placed in a regular class and in part-time special class ranged from $4011 for learning disabilities to $5417 for behavioral disorders. Other factors, such as the size of the district or the number of severely handicapped individuals in the area could result in variations of the actual costs.

An extensive review of the relative costs of special education based upon age of entry into intervention programs was recently published by Mary E. Wood. Wood (1981) compiled cost-effectiveness data from individual studies throughout the United States: Triple T Infant Consortium (Macy Research Associates, 1978; Macy and Carter, 1980); the Battelle Research Institute (Stock et. al., 1976); HCEEP Division of Innovation and Development, Office of Special Education and state departments of education. The cost model developed by Wood was based upon two assumptions: 1) early intervention results in proportional attrition rates from special education into

regular education from one education level to another and 2) those going into regular education will remain there. Support for these assumptions was provided from progress reports of HCEEP projects. The cost estimate was based on the actual proportion of handicaps within a given population rather than on national prevalence rates because children identified at an early age are usually more severely impaired than those identified in school. Also, costs for early programs were computed on a 12-month basis rather than the typical 10-month basis of school aged programs.

Wood's study resulted in the calculation of costs involved in providing special education intervention at various entry ages. These calculations indicate that early special education can result in a total cost savings of over $16,000 per handicapped student throughout their years in school. Wood further found that the attrition rate of children who leave special education and enter regular education is higher for students who receive preschool special education. Not only do the costs of special education services increase at each higher educational level, but the number of children requiring these services also increases as education is postponed. In other words, delaying intervention results in more children requiring more special services at higher costs.

The Schweinhart and Weikart (1981) study mentioned earlier indicated that the children who participated in the Perry Preschool Project required 50% fewer special education services. The cost per child for a two-year preschool program was $5,984. Three different types of economic benefits were identified:

- Savings of $3,353/child as a result of reduced need for special education services.
- Projected increase of $10,798/child lifetime earning on the basis of a higher educational level.
- Projected incomes for parents freed up to work were put at $688/child.
- A total of a 248% return on the cost of the original investment in the preschool program.

In Colorado, Weiss (1981) calculated the per pupil costs for the INREAL Project. The cost analysis indicated that this intervention treatment resulted in considerable per pupil dollar savings for each of the three years studied. Over a three-year period there was a $1,183.76 per pupil cost savings and a reduced need for later special education services.

Special education clearly costs more than regular education. However, to determine the true value of such an investment, the long-term payoffs must also be considered.

Long-Term Economic Returns of Early Intervention

Although the initial expenses of early education programs are high the long-term payoffs justify the initial investment. As "Closer Look" (1980) pointed out:

> It may seem like a paradox, but to save money it's often necessary to spend it. This is particularly true when it comes to education and training programs for people with disabilities. The combined savings resulting from taxes recovered from earnings, income maintenance reductions, and institutional avoidance indicate that education is a solid investment. The costs of dependency in most cases far outweigh the costs of developing independence. (p. 5)

Direct Savings

One economic benefit of early educational programs is the reduced need for costly special services (Lazar, 1979; Schweinhart and Weikart, 1981; Weiss, 1981). In both the Perry Preschool Project and INREAL the reduction of required special education services alone completely covered the cost of

the programs. Wood's study (1981) also supports these findings. According to her model, the cost of special services increases the later the entry age into special education. The earlier intervention begins, the greater the savings to taxpayers. This is especially true with the profoundly handicapped. Institutionalization is the most costly of all forms of service. If early intervention enables the profoundly handicapped to participate in special education programs provided by public schools, the community realizes vast savings.

Indirect Savings

Long-term savings occur as a result of increases in lifetime earnings. According to economist Gary Becker (1975), educated and skilled individuals earn more than others. He also notes that unemployment is strongly related to lack of education. Handicapped children who received preschool programs demonstrated significant scholastic gains (Lazar, 1979; Schweinhart and Weikart, 1981 and others) and had a stronger commitment to schooling. Thus, they could be expected to accrue more lifetime earnings than they might otherwise have accrued.

Braddock (1976) used the concept of educational payback period (the amount of time necessary for an education program to pay back its cost) to demonstrate the long-term savings of intervention for the handicapped. Braddock calculated income taxes based on minimum wage. He concluded that monies generated from gainful employment of a visually impaired person would produce savings of $16,304.. If the estimated costs of disability income maintenance were added to this, total savings would be $61,144 for each visually handicapped person. Similar calculations were determined for speech impaired persons ($87,076 savings) and for retarded persons in the work force rather than in institutions ($441,289). For individuals who are not severely disabled, taxes paid to the government and indirect savings income maintenance exceed the total cost of an educational program (Closer Look, 1981).

Indirect savings may also accrue to parents of handicapped children. Handicapped children can create enormous financial strains on family budgets. The pressure of caring for such a child may require a parent to give up employment (Takanish and Feshbach, 1982). A single parent may be forced to go on public assistance. The supportive services of early childhood programs help many parents maintain financial self-sufficiency.

The preceding cost/benefits analyses indicate that early intervention is cost-effective. There are substantial savings to taxpayers when education begins before the age of six. Money spent on the excess costs of early intervention can be paid back to the government through reduced future needs for special education services, higher projected earnings which result in higher income taxes, reductions in income maintenance payments and avoidance of institutionalization.

NATIONAL TRENDS TOWARDS PRESCHOOL SPECIAL EDUCATION

Presently 23 states have mandated legislation for the provision of educational services to children under five; four of these states begin service provision at birth (Nebraska, Iowa, Michigan, Maryland). In our Western region Nebraska, Oklahoma, Texas, and South Dakota have recently passed legislation and regulations mandating services to children under five. While Colorado has recognized a need for further services in this area, only a limited number of programs for young handicapped children exist.

CHAPTER TWO

COLORADO RESEARCH DESIGN STUDY

Four Colorado School districts — Adams County, Boulder Valley, St. Vrain, Weld County — provided preschool special education for children from 1974 to 1977. These districts participated in a program of scientific study to determine the effectiveness of preschool special education. One goal of the program was to improve language, thinking and social skills of three to five year-old handicapped children. Another program goal was to prevent future handicapping conditions for "at risk" children who might be identified as handicapped after they entered the public schools. For many children, the achievement of theses goals would:

- ★ reduce later school problems
- ★ reduce the need for special education services
- ★ eliminate the need for special education services

INREAL (INclass REActive Language), developed by Rita S. Weiss, PH.D. at the University of Colorado, was the special educaton preschool program used in these four districts. The INREAL program is a naturalistic, nonstigmatizing method of early childhood special education. This method is carried out within the classroom and emphasizes language development. Other studies have shown that language is the cornerstone of the learning tower which produces success in school.

Study Questions

The Colorado research design study asked three questions about the effectiveness of preschool special education:

1) Did the handicapped children who received preschool special education do better on tests than handicapped children who received no preschool special education?

2) If the handicapped children who received preschool special education learned more than the handicapped children who received no preschool special education, did this improvement last?

3) Does the long-term improvement in the handicapped children save money for school district special education programs?

Methodology

In each district, two equal groups of children were selected from the classrooms. One group of children received preschool special education. The other group received no preschool special education. The total number of children in the study was 518.

After the children finished the preschool special education program and went into elementary schools, their need for special education was followed for three more years (1977-80). Then, the cost of special education was calculated for these three years.

Results

For Question 1: The study results show that the children who received preschool special education scored statistically significantly higher on tests than the children who received no preschool special education.

For Question 2: The study results show that the improved learning in children receiving preschool special education lasts over time. The children who had received preschool special education needed significantly fewer special education services than the children who had received no preschool special education for each of the three years studied. These results demonstrate that the goals of the study, to improve learning skills in handicapped children, and to prevent handicapping conditions in other children, were achieved.

For Question 3: The study results show that the improvement in both the handicapped and the at-risk children saves money for the school district. Even after subtracting the costs of the preschool special education program,

the school dist. .s **over three years, saved $1560.00 per handicapped pupil and $1050.00 per at-risk pupil.** Preventing later earning and school problems and reducing the need for special education services during the elementary years saves Colorado tax-payers money.

Data

Two separate groups of children were examined. One group included children who were identified handicapped as preschoolers. The other group included children who were not identified as handicapped during their preschool years but who were "at risk" (due to medical or environmental conditions) of being identified as handicapped when they entered school.

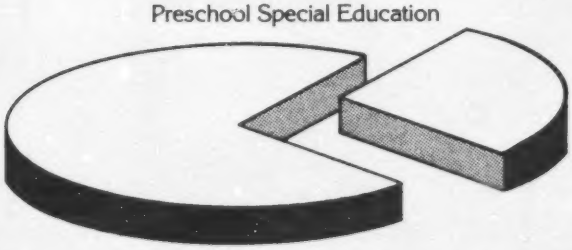
Group 1 - The follow-up study results for the children identified as handicapped showed:

During 1977-78

* 29% of the children who received preschool special education needed no further special education services.

* all of the handicapped children who received no preschool special education required special education services.

Preschool Special Education



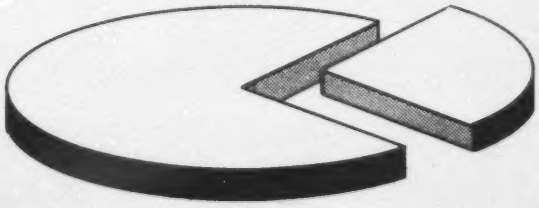
No Preschool Special Education

During 1978-79

* 19% of the handicapped children who received preschool special education needed no further special education.

* all of the handicapped children who received no preschool special education required special education services

Preschool Special Education



No Preschool Special Education

Even though some of the children who had received preschool special education continued to need special educatoin during the elementary grades, by the third year 38% no longer needed special education. On the other hand, only 7% of the handicapped children who received no preschool education no longer needed special education services.

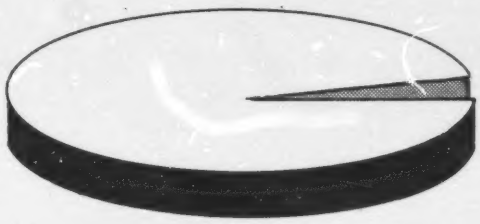
During 1979-80

* 38% of the handicapped children who received preschool special educaton needed no further special education.

Preschool Special Education

* 93% of the handicapped children who received no preschool special educaton continued to require special education services.

No Preschool Special Education

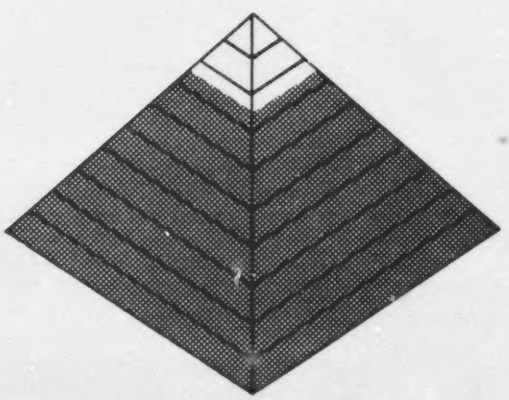


Group 2 - The follow-up study results for those children at-risk of being identified as handicapped after they entered public school showed:

During 1977-78

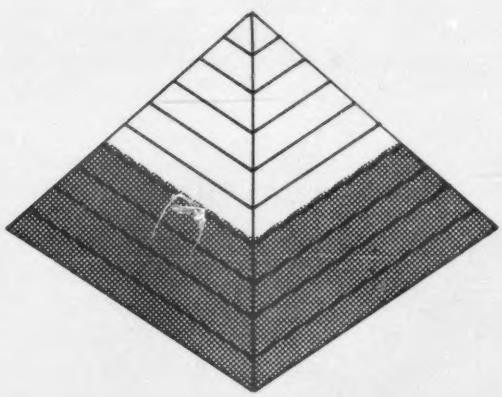
* 85% of the children who had received preschool special education needed no further special education services.

Preschool Special Education



* 51% of the children who received no preschool special education were identified as needing special education services.

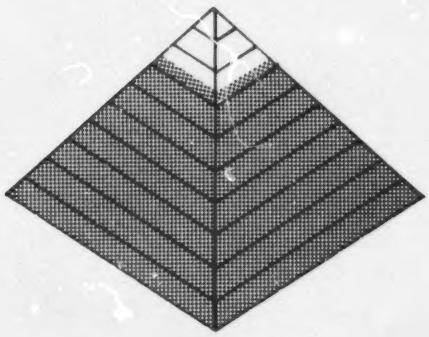
No Preschool Special Education



During 1978-79

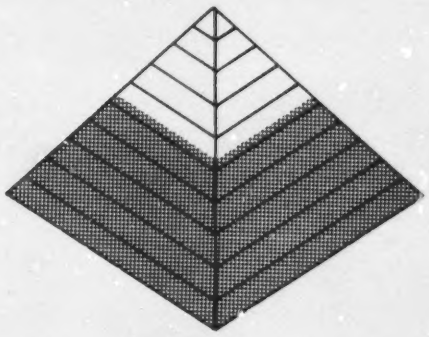
★ 84% of the children who had received preschool special education needed no further special education services.

Preschool Special Education



★ 62% of the children who received no preschool special education were identified as needing special education services.

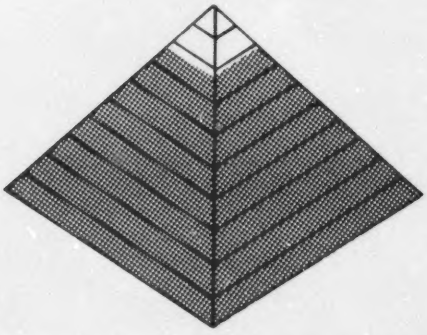
No Preschool Education



During 1979-80

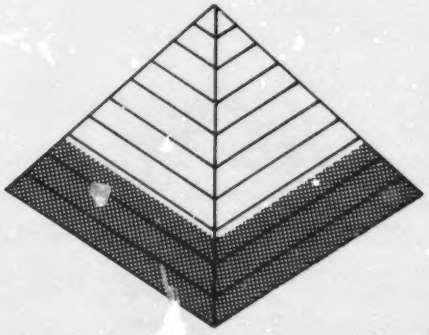
★ 89% of the children who had received preschool special education needed no further special education services.

Preschool Special Education



★ 38% of the children who received no preschool special education were identified as needing special education services.

No Preschool Education



RESULTS

The results of the experimental research design study show that the goals of the program were met. Handicapped children who attended a preschool program when compared to handicapped peers who did not:

- did significantly better in school over an extended period of time.
- had a reduced need for special education services.
- were more frequently able to benefit from regular education without any special support.

In meeting these goals the INREAL program demonstrated that handicapped children will achieve more success in school as a result of having a preschool experience. Besides the human benefit there is also an economic benefit gained in the reduced or eliminated need for expensive special services later on in a child's educational career.

CHAPTER THREE

COLORADO LOCAL LONGTUDINAL DATA

Chapter Two clearly demonstrates the potential benefit of preschool special education for children in Colorado who had been diagnosed as handicapped curing their preschool years. This carefully controlled research design study leaves no doubt that in this study preschool children made substantial gains, required fewer special education services when they reached elementary school and ultimately cost the school district **less** money than if they had not received preschool special educaton. How about those children who have been diagnosed as handicapped as preschoolers and have received preschool special education services in school districts across the state? Have these handicapped children received the same benefits as those who had the advantage of the experimentally designed INREAL program? In fact, a look at those children shows that they have achieved results very similar to those achieved by the smaller group examined in Chapter Two. Approximately 1/3 of these diagnosed handicapped children who attended special education preschool required no further special education services after they entered the public school system. An additional substantial percentage (37%) required fewer special services in school than would otherwise have been expected.

This chapter examines the effectiveness of preschool programs for handicapped children in Colorado in a less rigidly scientific but equally important way. It presents aggregated data from eleven sites across the state which have preschool programs for handicapped children. These data include the present educational placement of handicapped students who had previously attended the preschool programs; parent opinions as to the worth of the preschool experience for their children and for their families; teacher judgements as to the former preschoolers' present level of functioning in reading, math and language arts; and, opinions from school administrators across the state regarding preschool programs for the handicapped. These eleven school district reports are attached as addenda to this report.

Preschool Programs Included in the Study

The 11 sites included in the study, with descriptive information about each program, are presented in Table 1.

These sites represent all regions of Colorado, including the Denver Metropolitan, front range, eastern plains and the western slope areas. The preschool programs studied here have been in operation from 3-13 years. During these years 4,568 children were served with various approaches in a variety of different program settings.

TABLE 1
ELEVEN SITES INCLUDED IN STUDY OF THE EFFECTIVENESS OF PRESCHOOL PROGRAMS FOR HANDICAPPED CHILDREN IN COLORADO*

School District	#Students Served	Age of Children	Duration of Program YEARS	Type of Program
Adams Arapahoe District #28-J (Aurora)	45	3-5	4	Non-categorical center-based program with active participation of parents.
Boulder Valley District RE-2J	38	3-5	3	Began as home-based; then demonstration centers - 2 mornings & afternoons a week.
Arapahoe District #5 (Cherry Creek)	143	0-5	5	2 non-categorical Preschool programs; a parent-child group; individual sessions for children under 3 years.
El Paso District #11 (Colorado Springs)	1,131	3-6	13	4 non-categorical Early Intervention class locations in schools in 4 areas of the city. Each location serves 2 classes which meet mornings and afternoons.
Denver District #1	2,134	3-6	5	Variety of specialized programs which differ according to severity level.
East Central BOCES	90	0-5	5	Homebound-teacher visits home once a week for 1½ hours.
(Grand Junction Mesa) County District 51	106	3-5	4	Junction Early Education Program; K and Preschool classrooms.
Jefferson County District R-1	645	3-6	6	Jefferson Early Ed. Prog. Non-categorical classroom prog.; 4 mornings & afternoons/week
Northwest BOCES	159	2-5	8	Parent Advocate (PA) Preschool; Home-based
Pueblo District #60	76	3-5	3	4 self-contained preschool classrooms non-categorical; 5 hrs./day - 4 day/week.
Weld County District #6 (Greeley)	101	3-6	11	3 programs-Parent/Child Early Intervention Hearing Impaired Program, Preschool Program, Pre-primary program for Multi-impaired children.

* Total number served includes preschoolers presently being served.

Methodology

In order to assess the effectiveness of the special education preschool programs, personnel at each site were asked to track the subsequent educational placement of the handicapped students who had been served in their special education preschool programs. This involved retrieving records of past years and examining the "end-of-year" reports prepared by each district program. For those years prior to 1976, this meant examining individual children's files in the school district, if they were available. This "after-the-fact" evaluation method was chosen to remove any bias in reporting the student placement data. All identified handicapped preschool children for whom data were available were tracked, except in Denver, where the number of handicapped preschoolers was so large (2,134) that not all students could be tracked. In this particular case 155 students were randomly selected, taking into consideration ethnic group and geographical location.

Follow-up surveys were sent to as many parents of the handicapped preschool children as could be located to learn their preceptions of the value of the special education preschool program to their children and to their families. In order to learn the handicapped preschoolers' present level of functioning in reading, math and language arts, surveys were sent to teachers who had these children in class during the 1981-82 school year.

Subsequent Educational Placement of Preschoolers

As of June 1982, the number of students on whom educational placement data were available was 1,347. This number is reduced from the total number of handicapped children served because (1) the total number served includes those handicapped preschoolers who are still in preschool, (2) 2,079 Denver students are not included in the sample, (3) 428 handicapped students were found to have moved from the school district in which they attended special education preschool, and (4) there was no data on some students, particularly those served prior to 1976.

Of the 1,347 children remaining in the districts where they attended preschool programs for handicapped children, 424 (31.4%) are now in regular education classes with no special education support services. The early intervention of the preschool for handicapped children prepared these children who had been identified as handicapped at preschool age for entry into regular education at the begining of their educational careers.

A large number of the former preschoolers are now in regular education with only support services (500, or 37.1%). This support includes special education consultant services to the child's regular education teacher itinerant special education consultant services to the child, and resource room services to the child. These situations offer the children less restrictive environments than special education classrooms offer.

The remaining 423 students (31.4%) are in special education classrooms such as Significant Limited Intellectual Capacity, emotional/behavioral, or physically handicapped.

These data are reflected in Table 2.

TABLE 2
SUBSEQUENT EDUCATIONAL PLACEMENT OF HANDICAPPED CHILDREN

N = 1347*

Placement	No. of Students	% of Students
In REGULAR EDUCATION (No Services)	424	31.4%
In REGULAR EDUCATION WITH SUPPORT (Includes Consultant, Itinerant, Resource Room)	500	37.1%
In SPECIAL EDUCATION	423	31.4%

*Does not include students graduating from preschool in June, 1982 for whom placements were to be made in Fall, 1982.

Educational Placement by Severity Level

Two of the sites, Denver Public Schools and Pueblo District 60, kept records of severity levels of 196 children's handicapping condition — mild, moderate and severe. Of the children in the mild category, 97% are now in regular education and the remaining 3% are in regular education with only support services. No child in this category had to placed in a special education classroom at the beginning of his/her educational career.

In the moderate classification, only 30 percent had to begin public education in a special education classroom. Nineteen percent (19%) were able to be placed in regular education with no support services, and 47% entered public schools in regular education with special education support services.

Even in the severe category, one-third of the former preschool special education students were placed in less restrictive environments (9% in regular education and 24% in regular education with support services.)

These data are reflected in Table 3. It appears that when the data are analyzed by severity level, the total portion of these children entering regular education continues to be 31 percent.

TABLE 3

EDUCATIONAL PLACEMENT BY SEVERITY LEVEL

N = 196*

Severity Level	Regular Education	Regular Education With Support	Special Education
MILD N = 32	31 (97%)	1 (3%)	0 (-%)
MODERATE N = 100	23 (23%)	47 (47%)	30 (30%)
SEVERE N = 64	6 (9%)	15 (24%)	43 (67%)
TOTALS	60 (31%)	63 (32%)	73 (37%)

* Includes data from Denver Public Schools and Pueblo School District 60

Educational Placement by Handicapping Condition

Boulder Valley, Grand Junction, and Jefferson County kept data on 337 children by handicapping condition (Table 4). Again, close to a third - 29% - were able to start public schools in regular education.

TABLE 4

EDUCATIONAL PLACEMENT BY HANDICAPPING CATEGORY

N = 337*

Category	Regular Education	Regular Education With Support	Special Education
Perceptual/ Communicative N = 119	36 (30%)	43 (36%)	40 (34%)
Visually Handicapped N = 1		1 (100%)	
Speech/Language N = 71	37 (52%)	25 (35%)	9 (13%)
Emotional Behavioral N = 33	11 (33%)	5 (15%)	17 (52%)
SL IC/EMR/TMR N = 63	4 (6%)	2 (3%)	57 (91%)
Multiply Handicapped N = 42	9 (21%)	3 (7%)	30 (71%)
Hearing Handicapped N = 4			4 (100%)
Physically Handicapped N = 4	1 (25%)	2 (50%)	1 (25%)
TOTAL	98 (29%)	81 (24%)	158 (47%)

*Includes data from Boulder Valley, Grand Junction, and Jefferson County

Responses to Parent Questionnaire

Ten of the 11 sites administered parent questionnaires, to which 266 parents responded. The questionnaires were sent during the summer, and vacations may be partly responsible for the low response rate.

These parents overwhelmingly reported that the preschool experience was valuable to their children (90%) and to their families (99%). When asked if their children were doing better in school now, 98% said yes. Ninety-eight percent (98%) stated that as taxpayers and parents they believed that the state should financially assist in supporting preschool special education programs.

Parents reported that the preschool experience had made their children feel better about school and about themselves, had helped the family in coping with the handicapping condition, and had enabled the parents to have realistic expectations for their children.

Responses to Teacher Questionnaire

Seven of the eleven sites administered questionnaires to teachers who had the former preschoolers during the 1981-82 school year. Two hundred fifty eight teachers responded. From the aggregated data, it was not possible to determine the response rate of teachers. However, because the respondents reported that 28 percent of the students were not receiving special education services (31% of the students analyzed were not receiving services), the respondents appear to be a representative sample of teachers.

Three-fourths of the teachers were aware that the student on whom they were reporting had attended a special education preschool. Seventy-two percent (72%) of the students were at the time of the survey receiving some special education services. Teachers judged that about ten percent (10%) of these students, who as preschoolers had been identified as handicapped, were above average in reading, math, and language arts. From 27% to 32% of the students were judged to be average in these skills.

Responses to Telephone Survey of District Superintendents Special Education Director and Principals

Sixty respondents, half from districts with preschool programs for handicapped children and half from districts without such programs were surveyed by telephone. About a third were principals, a third were special education directors and a third were superintendents. All of the respondents from districts with preschool programs for handicapped children felt "very positive" about their programs and believed that other district administrators felt the same way. Almost all of the respondents from districts with special programs agreed that these programs have a positive impact on parents and families with handicapped preschoolers and almost all said they thought early intervention yields eventual cost savings. And when asked what their biggest problems were, the respondents most often mentioned funding.

Respondents from districts without preschool programs agreed that preschool special education programs benefited children and their families. When they were asked why they did not have such programs the major reason cited was funding.

The results of this part of the study which focussed on the subsequent educational placement of students who attended special education preschools in eleven Colorado School districts reflect both the national data results and the Colorado Research Design Study.

The data from these three sources indicate that special education for preschool children identified as handicapped resulted in a large percentage of these children being able to begin public education in regular classrooms with no special education services. For an even larger number of students, special education at the preschool age meant that they required fewer special eduction services when they entered public school.

Preschool special education services have proven to be beneficial for the students involved. For them, the isolation from regular classroom activities has been reduced. In addition, this reduction in required special education services to these children has resulted in cost savings to school districts and, ultimately, to society in general.

MICHAEL AND MICHELLE

Michael began attending the Demonstration Center in the Spring, 1980. He displayed a severe multiple articulation disorder and difficulties with his gross and fine motor movements. Michael sometimes refused to speak at all. Although he was 4½ years old he was not consistently toilet trained. Michael appeared awkward and disorganized when doing tasks. Michael's fraternal twin, Michelle, often participated in the program as a language model. At the Child Find screening, Michelle was the dominant twin with developmental skills close to age level. Recommendations for Michelle had included gross motor stimulation, regular preschool and speech/language rescreening while Michael was assessed and referred to the preschool special education program.

Since the twins turned five years old August, 1980, their parents began looking for new school placements. Michael was placed in a self-contained special education (Pre-Academic) program where he received individualized and small group instruction, speech therapy and occupational therapy. Against the recommendation of the program team, Michelle's parents enrolled her in the regular kindergarten class at the same elementary school as Michael. Team members felt that Michelle was immature and could benefit from a year of preschool.

During his first year of school Michael made slow but steady gains. Progress was noted in motor planning and self-help skills. Another year of Pre-Academic was recommended. Michelle's socialization skills improved but she lacked the readiness skills to enter first grade. She was retained in kindergarten. For the first time, Michelle's parents began to see Michael as the more capable twin.

By the end of his second year of school Michael had made excellent gains in spite of the fact that he was out of school for several weeks with meningitis. His articulation had improved, readiness skills were at age level and he was well liked by his peers. Michael entered a regular first grade class with support services. Michelle was still unable to acquire readiness skills during her second year of kindergarten. She had trouble finishing her work and often daydreamed. She could learn in a one-to-one situation but seemed lost during group activities. Testing revealed that she had difficulties with auditory processing and fine motor development. Michelle was identified as perceptually handicapped and placed in a self-contained class for the 1982-83 school year.

It is not known whether Michelle will make the progress that Michael has and return to the regular classroom in two years. It is feared that it may take longer because she did not receive appropriate stimulation during the preschool years.

JOSHUA

Joshua was identified at two years of age as having a severe impairment of vision known as congenital hereditary myopia. With glasses his vision was corrected to 20/70 or 20/80. However, he also had tunnel vision and saw objects as 1/3 their size. Uncorrected, Joshua's vision was 20/800.

After in-depth evaluations through Child Find and the JFK Center in Denver, Joshua was staffed into the program when he was three years old. Fine motor tasks were initially difficult. Joshua displayed some dysfluencies in his speech and a 8-9 month delay in language development. He also displayed a 6-8 month delay in gross motor development. The mild delays in gross and fine motor were felt to be not only related to Joshua's visual impairment but to a sensory integrative dysfuncton. While Joshua was usually a personable, outgoing child, his behavior was sometimes difficult to manage. Joshua's parents were unsure what to expect of him.

Joshua and his mother began attending the Boulder Demonstration Center twice a week in the Spring, 1980. Joshua received small group and individualized instruction from the

Parent/Family Coordinator. He participated in motor and language groups. Joshua's confidence in his abilities improved and his temper tantrums subsided. Language and socialization skills became a strength. Joshua's family was very supportive of his special needs. His mother, a high school math teacher, was effective in the Demonstration Center with small groups of children. Through the program she became acquainted with the state-wide organization Parents Encouraging Parents (PEP) and is now a local leader.

In the summer of 1981, Joshua's family discovered that he was suffering from retinitis pigmentosa, a degenerative eye disease that usually results in blindness. The parents immediately offered their support. In spite of the diagnosis Joshua continued to make progress. Due to his lack of peripheral vision Joshua learned to look down before he got up from playing so he could not trip over toys or other children. His occupational therapist stressed activities in which Joshua visualized himself doing motor activities. When he was able to swing on a rope swing and jump off, the preschool team saw an important self-confidence goal achieved.

This fall Joshua entered the extended day kindergarten at his home school. He is bused to school due to his impaired ability to cross streets. Joshua received itinerant special education help from a teacher of the visually impaired. Joshua functions well in kindergarten class with a few minor adjustments in his program; he sits close to the teacher at story-time and after recess he remains in the coat room until his eyes adjust to indoor light. Joshua is happy and looks forward to going to school.

Without the intervention of the preschool program, Joshua's family feels that he would not be the self-confident learner that he is today. Through the support of the preschool they learned to accept his disability and to prepare him for his total loss of vision in the future.

SEAN

Sean first came to the attention of our center as a result of a request for evaluation by his mother. Testing indicated that, at age 3.6, his motor development was significantly delayed. He was unable to jump, could kick a ball only by using a wall for support, and used a palmer grasp to manipulate small objects. Test results on the McCarthy Scales of Children's Abilities indicated that he was functioning at the first percentile in almost all areas. His General Cognitive Index (a measure directly comparable to an intelligence quotient) was 65, which corresponds to mildly mentally retarded. Indeed, all indications pointed towards a placement in a classroom for children with Significant Limited Intellectual Functioning upon his reaching school age.

Fortunately, Sean had a very concerned mother who sought assistance for him. He was enrolled at a program through Denver University for speech and language therapy and was seen through the Children's Hospital for occupational therapy. He was also enrolled in the Parent Intervention Preschool Project funded by the Colorado Department of Education and operated by the Aurora Public Schools. During the year in which he participated in this program he was provided with intensive assistance in language and motor development. His mother was an active part of the programming and continued to work with Sean at home, assisted by the program staff.

As a result of his mother's concerns and interventions provided to him, Sean was able to enroll in a regular Aurora Public Schools Kindergarten with a minimal amount of outside assistance (non-special education). Testing conducted on him after his participation in the program indicated normal intelligence and approximately two and one half years gain in virtually all areas.

Sean is now in second grade. Although he continues to experience some academic difficulties, he has become a student who can be expected to progress through school

with a minimal amount of outside intervention. After Sean's involvement with our program, his mother continued to work with our classroom as a volunteer aide and later as a paid instructional aide. She has also been active in promoting support groups for parents of handicapped children, has promoted early childhood special education on both local and state levels, and has provided a tremendous amount of support to the cause of Early Childhood Education.

COMMENTS FROM PARENTS

"It gave my daughter an education as well as playmates. It let the rest of my family know we weren't the only ones struggling to find answers or dealing with the day-to-day problems and heartbreaks of raising these children."

****

"The testing they gave my child was very extensive. When they received the results, the staff answered any and all questions I had. The teachers and therapist all worked together with me to insure that my child received the help he needed.

Preschools are very important to screen the kids with problems rather than let them fall behind their normal age group. My son is only one year behind his age group. If he hadn't had preschool he could have lost another year.

With all the reports from the preschool the public school was able to make up a program for my son before school started.

We need more special programs in the schools to help these kids. The therapy he is now receiving has made a world of difference. With the special help he is able to go to school with his brother, sister and all his friends."

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"The preschool program gave my child the individual attention he needed at the time he needed it most. Also, because of my low income, the state funding was the only way my child could receive the extra help.

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'I could write a letter three pages long on the assistance my child received in this program. I cannot express my gratitude to those teachers. My child went from an approximate ten word vocabulary to a vocabulary very close to what is expected of her age group. And her enthusiasm is tremendous! She can hardly wait to start kindergarten this year. It is a fantastic program. Every child should go. They love it!"

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"Our child was nonverbal at age three. The preschool helped us get him to talk. He was very immature socially and they helped him to begin relating to adults and some children. He showed very little emotion and they helped him to begin showing how he felt and told the family how to encourage and accept these feelings. The testing was valuable in that we all learned that we were dealing with a very intelligent child who had a learning problem. It is so important to know what you are dealing with!

The program meant success, rather than failure, to our child and to us as a family. That is, we thought we were failing because he was not learning. In reality, we were doing a fine job, we just had a special child with special needs.

Now that he is of school age, he is much better off than he would have been without the preschool help. In another year, he will probably be in a regular classroom. In the long run, it saves taxpayer money to start helping children with special needs at the preschool age."

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"It was a fun and learning time for us as a family and for our child. The teachers were fantastic!"

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"We learned different ways to help our daughter work with her coordination and motor functions."

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"It did wonderful things for our boy when he started talking ... It was a whole new world for him."

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"It meant we were bonded even closer and working together ... to understand her and each other."

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"The school really helped Mark find worth in himself as a person. The teachers really brought Mark and his abilities — not his disabilities — out."

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"My son has met many new friends and looks forward to going to school. The last two years have drastically changed his character, his intellect; he's so secure about the staff and classroom environment."

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"This program has brought a ton of relief for the parents and a safe learning atmosphere for our child."

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"This invaluable program gave my son confidence in himself ... It has encouraged me and taught me how to help him."

1115 North El Paso
Colorado Springs, CO 80903
August 30, 1979

Dear Mr. Ayers:

(Superintendent of Schools at the time letter was written.)

I would like to take this opportunity to tell you how much I appreciated the Colorado Springs special education preschool program.

Both of my children were in the program from 1969-1974. The oldest one is going into the 9th grade this fall. Last year she was on the honor roll for three quarters. She likes school. It isn't easy for her. She studies but she likes it and most of all she likes herself. The youngest will be in the 5th grade this year. He doesn't study as hard as his sister, but he has a good attitude about school and himself.

I can not praise the preschool special education program enough. It is something that can not be measured in dollars and cents. Because my children got the help they needed in preschool, they have never had to be in a special education program in their regular school years. I'm so thankful for the help.

I know the program has been expanding and I would like to see it expand more and reach more children. Believe me, I know the program works! I'm a grateful parent.

Sincerely,

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Two years ago when my son started preschool he was a great concern to us as parents.

Now, I feel like he can be termed a Preschool Project success story.

Realizing that this has been a cooperative effort involving us as parents, the two of you, Mrs.
and most of all my son himself, we still feel a tremendous sense of gratitude for the part you have played in his development and ours too.

You both give the impression that this is more than a job to you, but that you sincerely care about the development of these children. We believe that because of this attitude and approach we now have a child who can enter first grade next year, maybe not with the battle completely over, but now with a chance and opportunity to win that battle, which he will, but maybe wouldn't have without all of your help. And isn't that what the Project is all about, a chance for children like my son to overcome their difficulties? You have succeeded in your purposes.

Thank you very much,

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